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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,637	11/21/2003	Gi Hyeong Do	9988.074.00-US	9123
30827 7590 11/23/2007 MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			EXAMINER PATEL, RITA RAMESH	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/717,637	DO ET AL.	
	Examiner	Art Unit	
	Rita R. Patel	1792	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) 8-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Response to Applicant's Arguments / Amendments***

This Office Action is responsive to the amendment filed on 9/19/07. Claims 1-7, 13, and 14 are pending. Claims 8-12 are withdrawn. Claim 14 has been amended. Applicant's arguments have been considered, but are not persuasive. Thus, claims 1-7, 13, and 14 are finally rejected for the reasons of record.

This application contains claims 8-12 drawn to an invention nonelected without traverse in the reply filed on 8/10/06. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

In response to Applicant's remarks, firstly Applicant contests that the application of "intended use" is improper because the current rejection relies on a 35 USC 102 rejection, and must instead rely on a 35 USC 103 rejection to be proper according to *In re Casey* 54 CCPA 938, 370 F.2d 576, 152 USPQ 235 (1967) and *In re Otto*, 50 CCPA 938, 312 F.2d 937, 136 USPQ 458 (1963). However, Applicant is urged to look at *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997); intended use if not limited to use under 35 USC 103 only, intended use may be properly employed under 35 USC 102 as well.

Secondly, Applicant argues that the Cho reference relied upon does not teach every element of claims 1-2 and 12 and thus cannot anticipate these claims. More specifically, Applicant argues that Cho fails to teach outputting a voltage signal. However, Applicant has not addressed Examiner's previously filed remarks in the Non-final action dated 6/21/04 with respect to Cho's ability to output a voltage signal indicative of a width of the pulse. Applicant merely argues that an excerpt of Cho literally recites that when the motor is employed at a constant current, then the time taken to reach a certain speed can be detected, and that this excerpt fails to read on a drive motor outputting a voltage signal indicative of a width of a pulse. However, as noted in the Non-Final action filed 6/21/07, the Examiner's position is reiterated here:

However, it is known in the art to measure drum rotation by the pulse speed, pulse speeds are sensed to measure rotations, and in this case the pulse speed of a washing machine measures the tub rotations. In Figure 2C of Cho it is illustrated that the laundry amount (small, medium, large) can be ascertained by the sum of the velocity of the motor over a defined period of time. Additionally, Cho teaches a current controller 103 which is used to measure current. Current is comprised of pulses. Thus, Cho does teach deriving an integration value, which Cho calls a total velocity, from a voltage signal output from a pulse sensor, which Cho calls a current controller 103...Since the apparatus is claimed and the structural features of Cho are substantially identical to these claimed, it is the Examiner's position that they are fully capable of performing the claimed function.

For the purposes of clarification, it is noted that current and voltage are directly related;  $\text{Voltage} = (\text{Current}) * (\text{Resistance})$ . Thus, the inherency relied upon here is that a current controller is inherently related to the voltage. In Cho, an integration value is derived from a voltage signal output by way of a pulse sensor that is measured by a current controller.

The Office maintains its former rejection over Cho. See Non-final action filed 6/21/07.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho et al. (US Pub. No. 2002/0050011) herein referred to as “Cho”.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

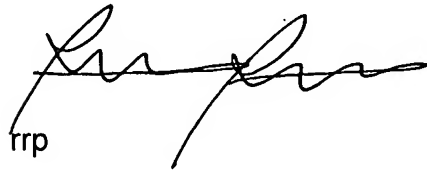
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



rrp



**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER